

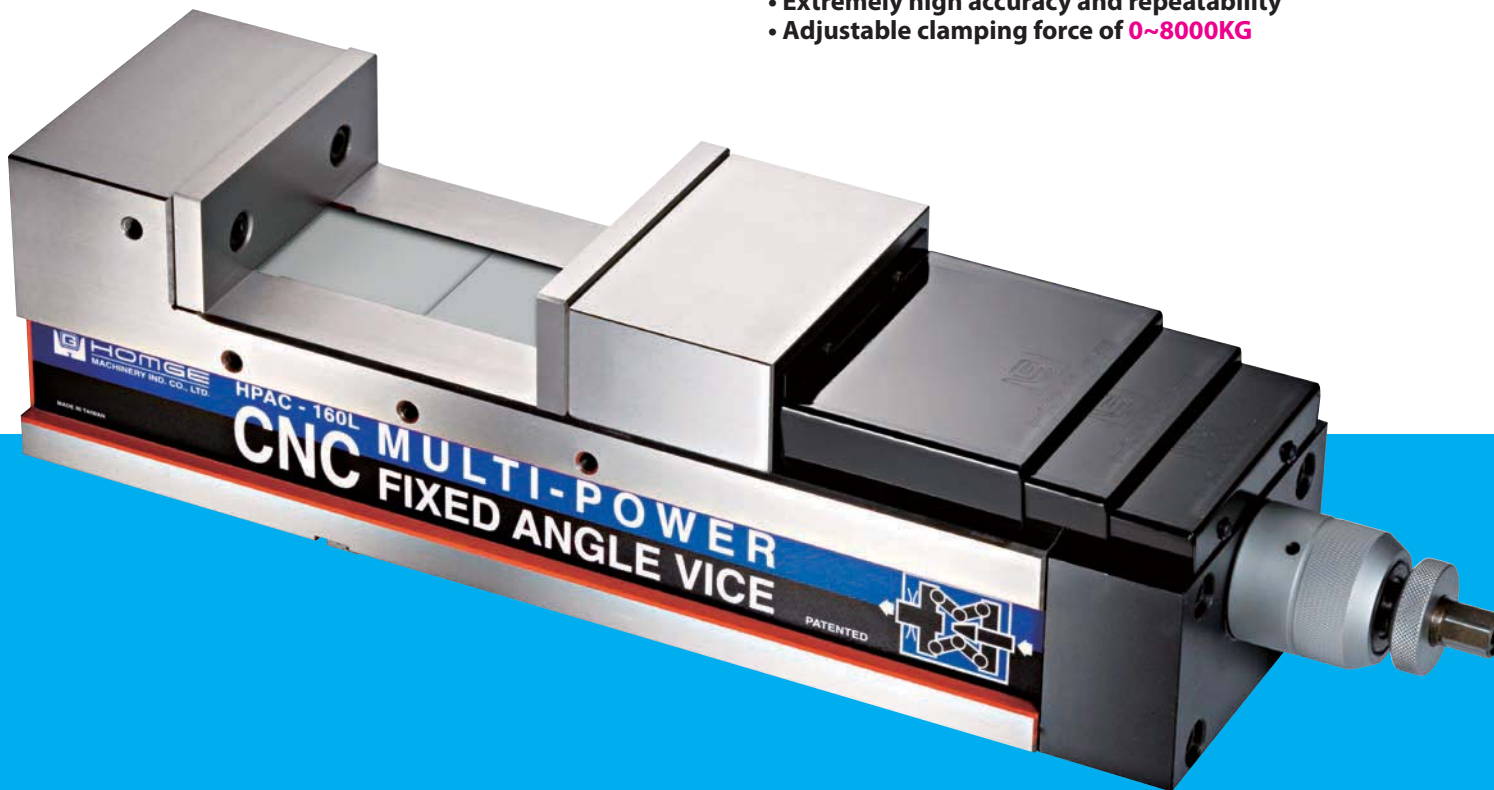
PATENTED
142711
M287204
M320459

V-16~18

MULTI-POWER CNC PRECISION FIXED ANGLE VICE

Model: HPAC-130, 160, 160L, 200

- Extremely high accuracy and repeatability
- Adjustable clamping force of **0~8000KG**

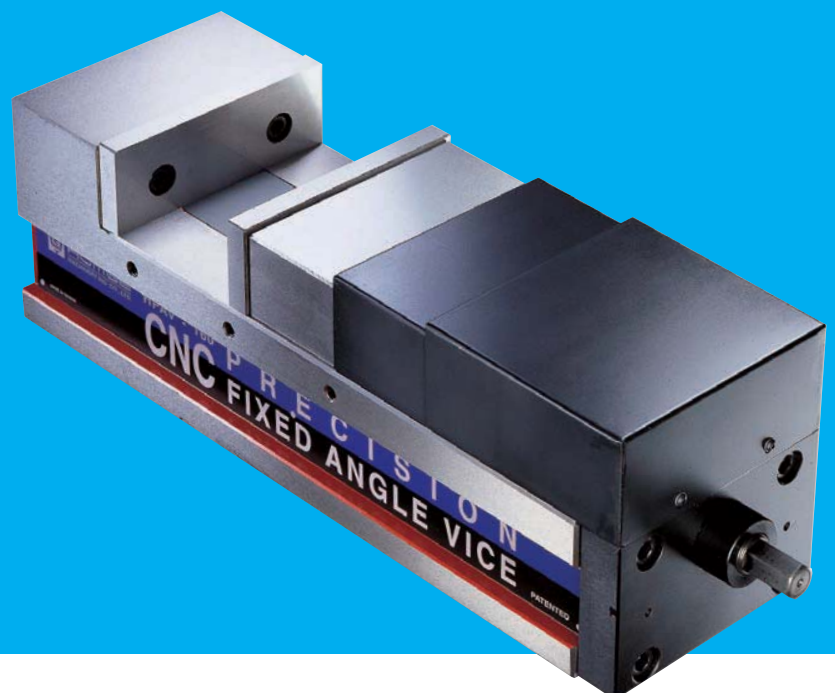


V-19~21

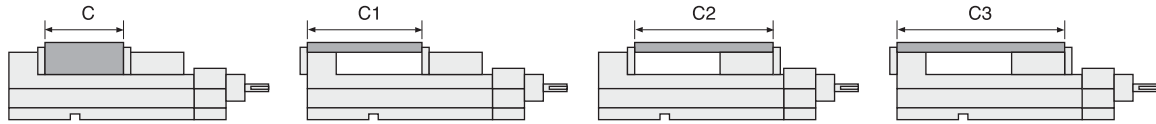
CNC PRECISION FIXED ANGLE VICE

Model: HPAV-130, 160, 160L, 200

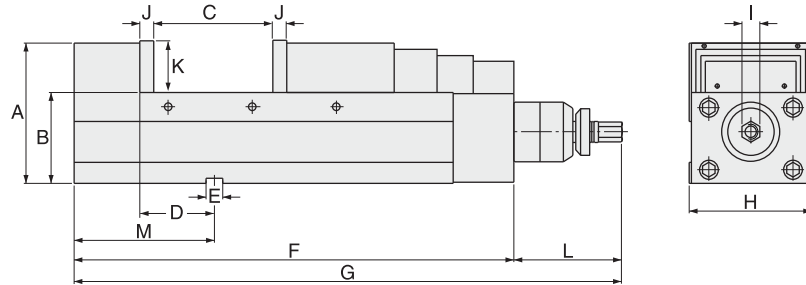
This vice has the same features as model HPAC above but has standard clamping screw instead of the MULTI-POWER SYSTEM.



DIMENSIONS FOR 4 JAW PLATE POSITIONS



DIMENSIONS

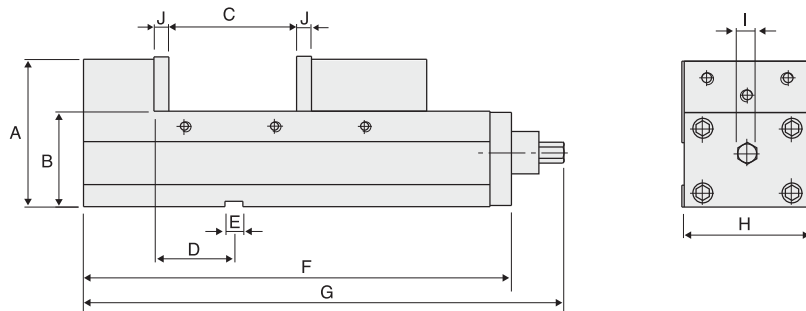


SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

Unit: mm

NO	Model	A	B	C	C1	C2	C3	D	E	F
V-16	HPAC-130	147	95 ± 0.01	0 - 190	70 - 260	115 - 305	185 - 375	80 ± 0.02	18	475
V-17	HPAC-160	160	105 ± 0.01	0 - 250	85 - 325	140 - 375	220 - 460	80 ± 0.02	18	560
V-17A	HPAC-160L	160	105 ± 0.01	0 - 300	85 - 375	110 - 395	190 - 480	80 ± 0.02	18	580
V-18	HPAC-200	170	110 ± 0.01	0 - 290	90 - 380	155 - 440	240 - 530	100 ± 0.02	18	635
NO	Model	Max. damping Force	G	H	I	J	K	L	M	Weight (kg)
V-16	HPAC-130	6000kg	583	131	19	15	55	120	150	47
V-17	HPAC-160	8000kg	670	161	19	15	58	120	165	65
V-17A	HPAC-160L	8000kg	690	161	19	15	58	120	165	67
V-18	HPAC-200	8000kg	743	201	19	18	63	120	197	95

DIMENSIONS



SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

Unit: mm

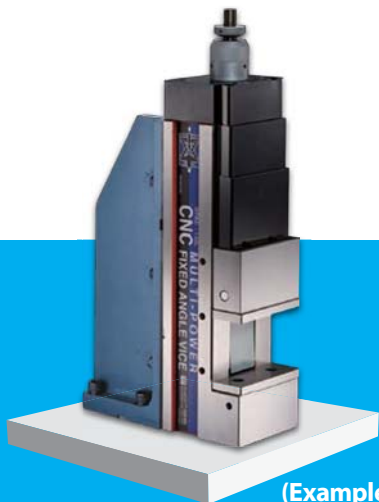
NO	Model	A	B	D	E	F	G	H
V-19	HPAV-130	147	95 ± 0.01	80 ± 0.02	18	440	520	131
V-20	HPAV-160	160	105 ± 0.01	80 ± 0.02	18	525	564	161
V-20A	HPAV-160L	160	105 ± 0.01	80 ± 0.02	18	545	584	161
V-21	HPAV-200	170	110 ± 0.01	100 ± 0.02	18	600	680	201
NO	Model	I	J	C	C1	C2	C3	Weight (kg)
V-19	HPAV-130	19	15	0-190	70-260	115-305	185-375	42
V-20	HPAV-160	19	15	0-250	85-325	140-375	220-460	60
V-20A	HPAV-160L	19	15	0 - 300	85-375	110-395	190-480	62
V-21	HPAV-200	19	18	0-290	90-380	155-440	240-530	90



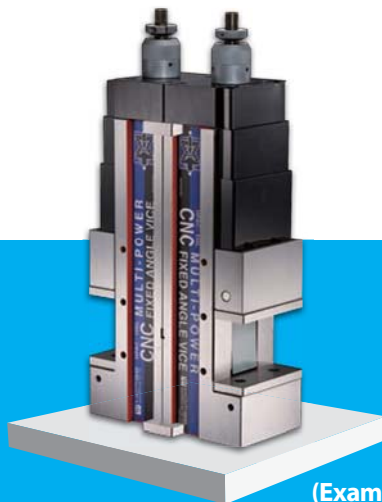
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MULTI-POWER CNC PRECISION FIXED ANGLE VICE

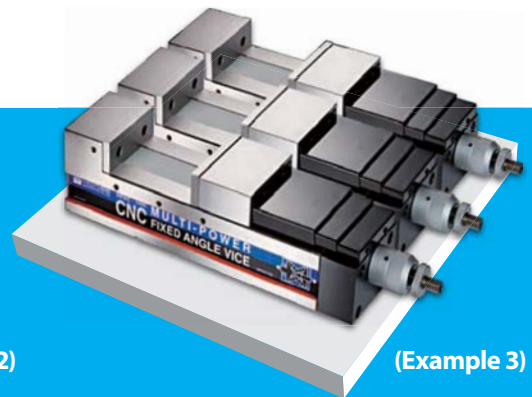
Model: HPAC-130, 160, 160L, 200



(Example 1)



(Example 2)



(Example 3)

ION

1. Vice body is made of **Ductile Iron** above **FCD 60** grade for high precision and durability and is made in one solid piece. It has very high rigidity and with a force of 4500kg, the shape will deflect less than **0.01mm**.

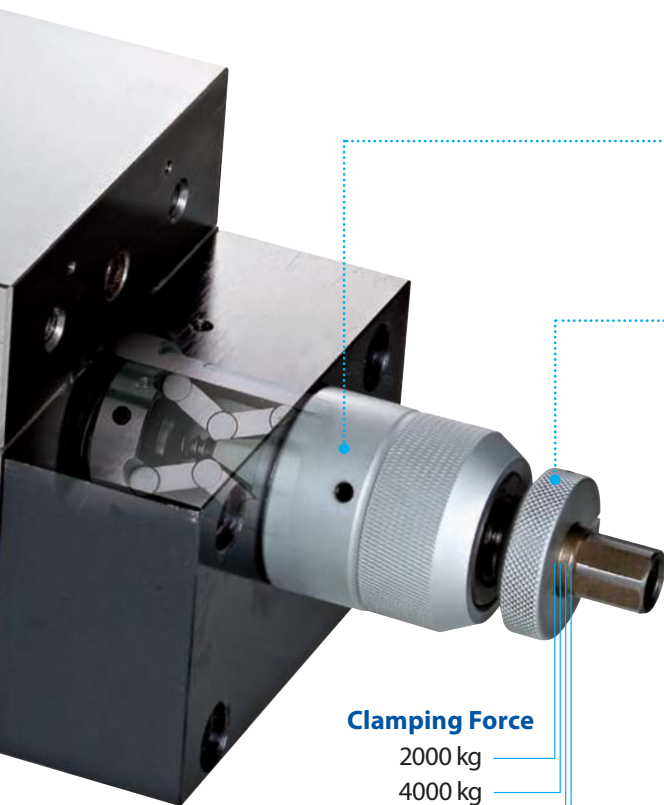
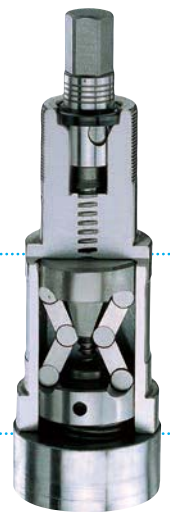
2. Slide ways are **HARDENED** to **HRC 50°** to further increase durability and maintain positioning height over long use.

3. Using high-grade iron of over FCD 60 grade for high rigidity and also **ANGLE-LOCK SYSTEM** which automatically pulls the work-piece down to the accurate position of within **0.01mm** under 4500kg of pressure, this vice is most suitable for precision mould making on Machining Centers.

4. Vice can be mounted horizontally or vertically.

5. The patented MULTI-POWER SYSTEM built of **HIGH GRADE BEARING STEEL** doubles the clamping force.
*With the **first half a turn**
 the vice will clamp with **2500kg** pressure.
 With a **second half turn**
 it will apply **4500kg** of clamping force.*
This special patented system makes the clamping force constant.

6. **Adjusting stop ring:** this simple and effective presetting device enables to **preset each desired clamping force** and it guarantees to repeat each clamping operation at the same clamping force.



Clamping Force

2000 kg
 4000 kg
 6000 kg
 8000 kg



STANDARD ACCESSORIES:

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp

OPTIONAL ACCESSORIES:

- Cross Grooved Jaws
- 'V' Jaws
- Combined Jaws
- Step Jaws
- Front / Back Jaws

The patented MULTI-POWER SYSTEM built of **HIGH GRADE BEARING STEEL** provides extremely high clamping pressure. The pressure is more consistent and eliminates all leakage and maintenance problems associated with Hydraulic Vices.

Fixed height so several vices can be used together.

This product is suitable for multi-unit applications on both horizontal and vertical CNC Machining Centers as well as conventional Milling Machines where heavy duty machining requires a very high clamping force.

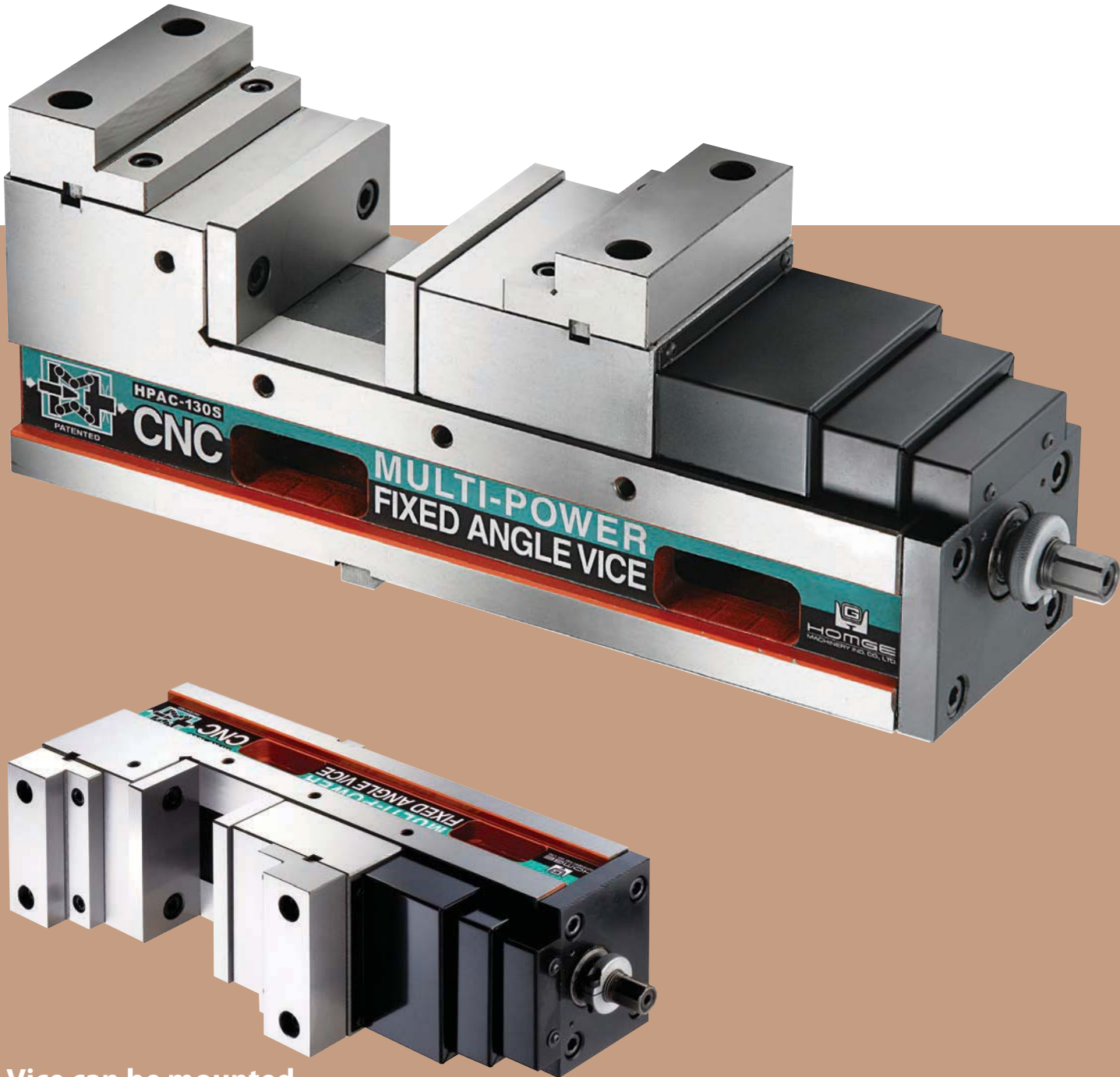
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V-22A / 22 / 22B

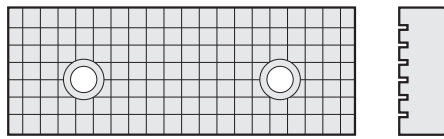
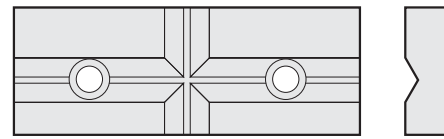
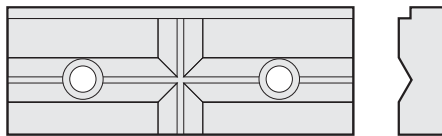
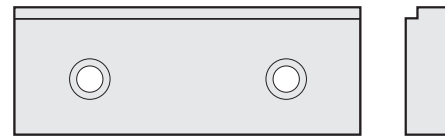
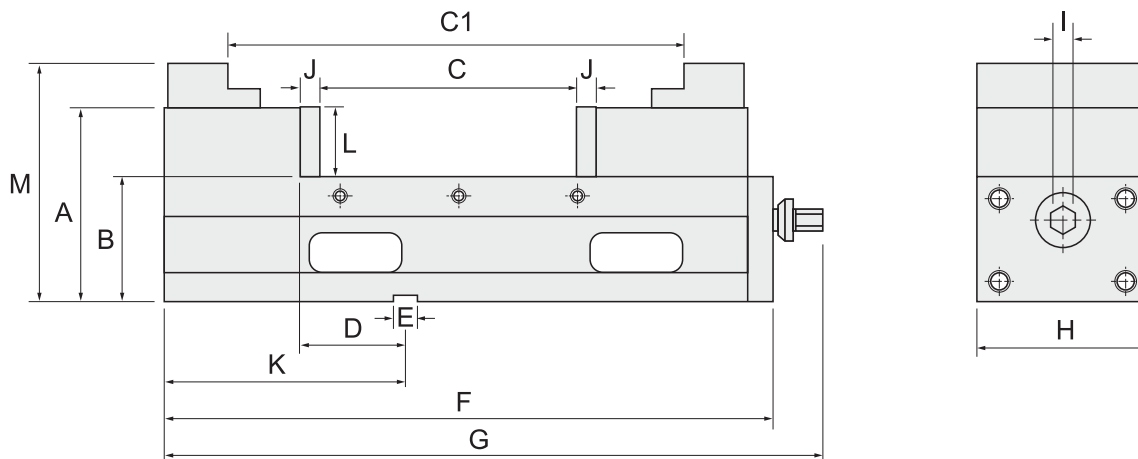
MULTI-POWER CNC PRECISION FIXED ANGLE VICE

Model: HPAC-100S, 130S, 160S

- Shortest Length with Big Jaw Opening
- Extremely High Accuracy and Repeatability
- Special MULTI-POWER design enhances clamping force of **0 ~ 8000KG**



Vice can be mounted
horizontally or vertically.

OPTIONAL ACCESSORIES:

1) Cross Grooved Jaws

2) 'V' Jaws

3) Combined Jaws

4) Step Jaws
DIMENSIONS

SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness: HRC 50°)

Unit: mm

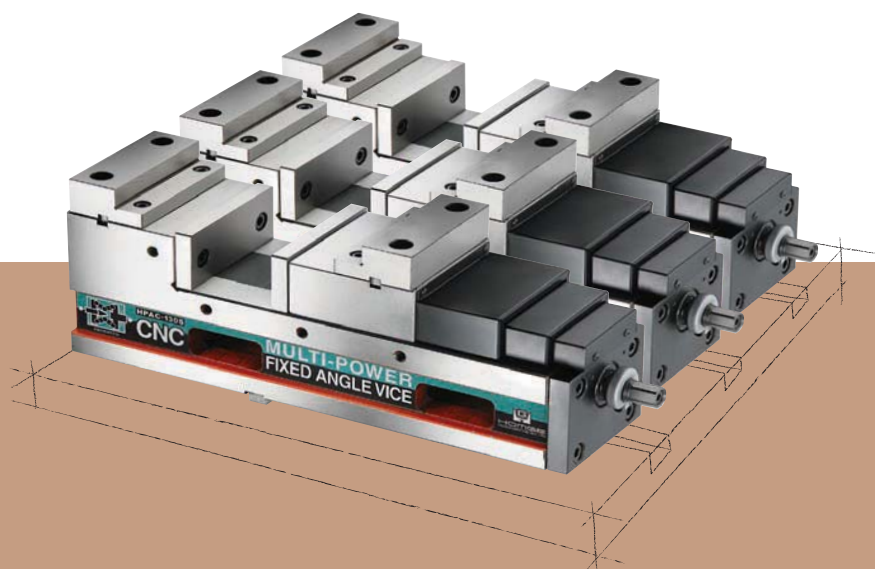
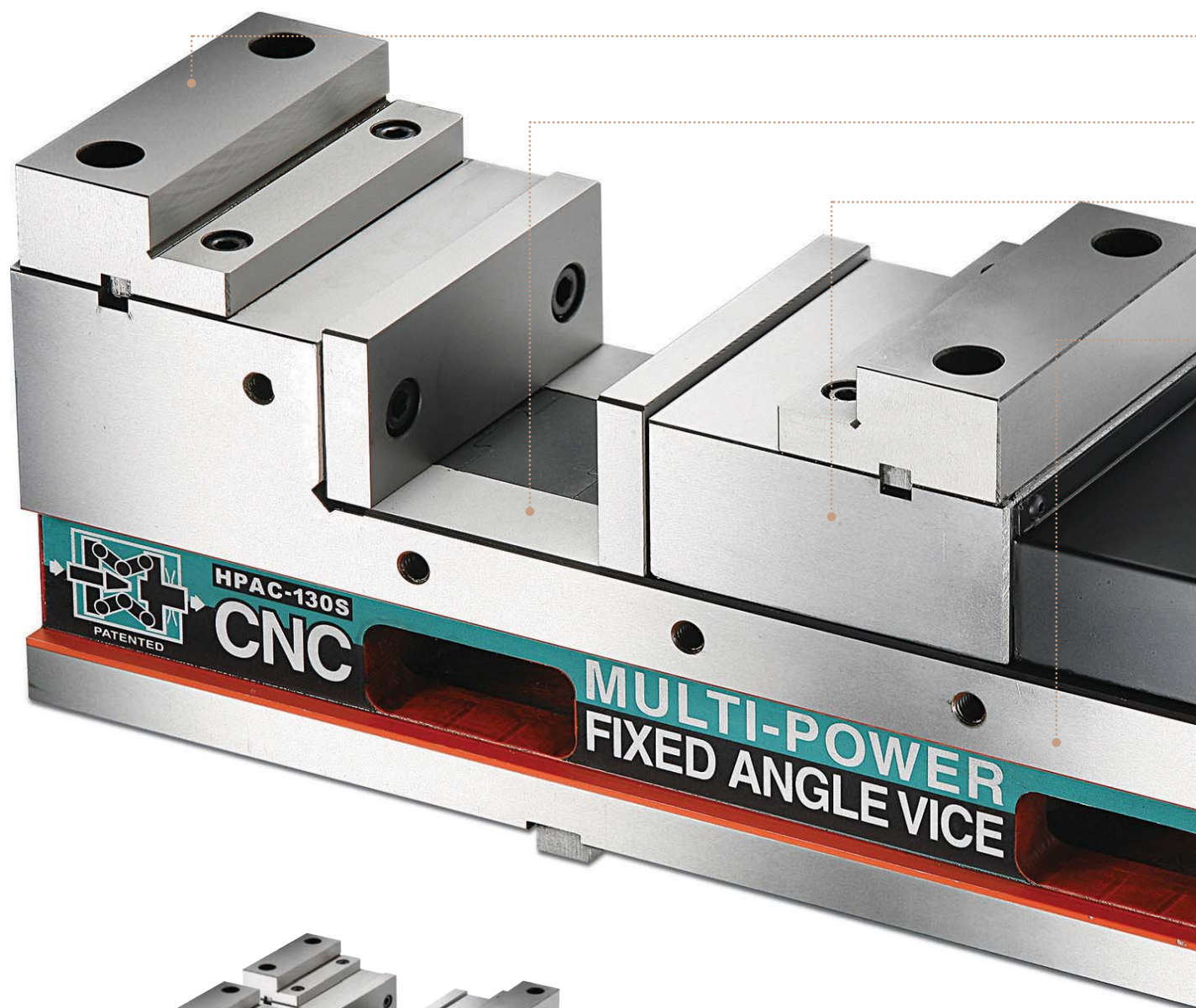
NO	Model	A	B	C	C1	D	E	F	G
V-22A	HPAC-100S	127	85 ± 0.01	0-170	115-280	75 ± 0.02	18	414	460
V-22	HPAC-130S	147	95 ± 0.01	0-190	155-340	75 ± 0.02	18	462	510
V-22B	HPAC-160S	160	105 ± 0.01	0-250	190-430	80 ± 0.02	18	532	580
NO	Model	Max. damping Force	H	I	J	K	L	M	Weight (kg)
V-22A	HPAC-100S	5000kg	100	19	15	178	44	153	32
V-22	HPAC-130S	6000kg	131	19	15	178	55	181	46.5
V-22B	HPAC-160S	8000kg	160	19	15	183	58	196	64



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MULTI-POWER CNC PRECISION FIXED ANGLE VICE

Model: HPAC-100S, 130S, 160S



*Fixed height
Special for*

ON

1. The patented MULTI-POWER SYSTEM is built of **HIGH GRADE BEARING STEEL** which doubles the clamping force. Adjustable clamping force of **0~8000kg**. With this special patented system the clamping force remains the same.

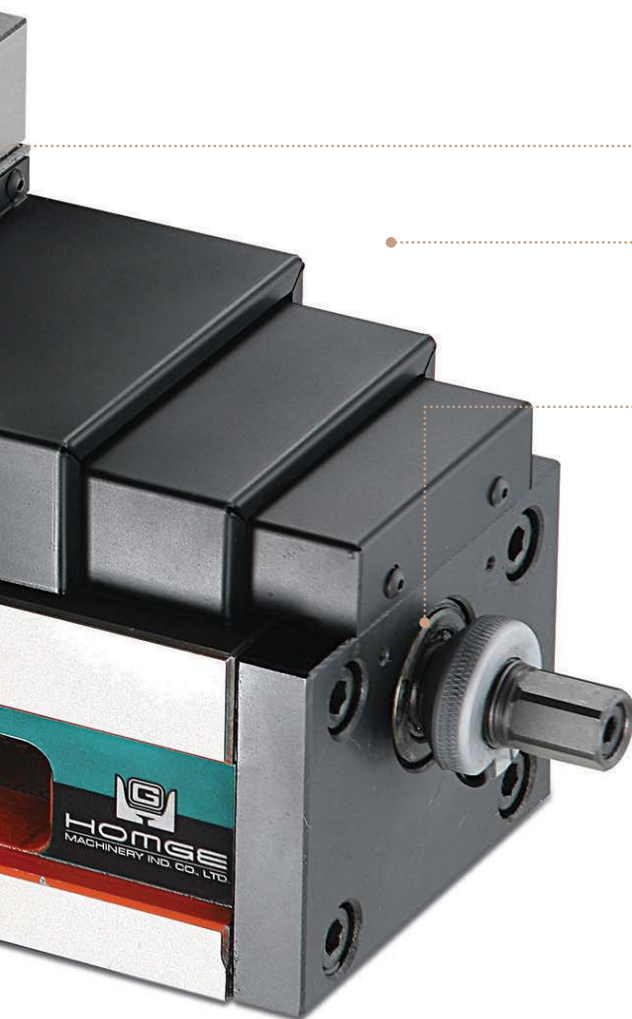
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4. Vice body is made of **Ductile Iron** above **FCD 60** grade for high precision and durability. *It is made in one solid piece and has very high rigidity with a force of 4500kg, the shape will deflect less than 0.01mm.*

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6. Adjusting stop ring: this simple and effective presetting device enables to **preset each desired clamping force** and it guarantees to repeat each clamping operation at the same clamping force.



STANDARD ACCESSORIES:

- 2 pcs of Alignment Wedge
- 4 pcs of Clamp

OPTIONAL ACCESSORIES:

- Cross Grooved Jaws
- 'V' Jaws
- Combined Jaws
- Step Jaws

so several vices can be used together.

High Speed CNC Machining Center